

108 SEQ LIST RESUBMISSION.ST25
SEQUENCE LISTING

<110> James, Kenneth D.
Rahdakrishnan, Balasingham
Malkar, Navdeep B.
Miller, Mark A.
Ekwuribe, Nnochiri N.

<120> NATRIURETIC COMPOUNDS, CONJUGATES, AND USES THEREOF

<130> 014811-205.108

<140> US 10/723,933
<141> 2003-11-26

<150> US 60/429,151
<151> 2002-11-26

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<170> PatentIn version 3.3

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Cys

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10

15

Ser Ser Ser Ser Gly Leu Gly Cys Xaa

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25

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Leu His Leu Ala Phe Leu Gly Gly Arg Ser His Pro Leu Gly Ser Pro
20          25          30

Gly Ser Ala Ser Asp Leu Glu Thr Ser Gly Leu Gln Glu Gln Arg Asn
35          40          45

His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
50          55          60

Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
65          70          75          80

Glu Val Ala Thr Glu Gly Ile Arg Gly His Arg Lys Met Val Leu Tyr
85          90          95

Thr Leu Arg Ala Pro Arg Ser Pro Lys Met Val Gln Gly Ser Gly Cys
100         105         110

Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
115         120         125

Lys Val Leu Arg Arg His
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Gln Gly Ser Gly
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35 40 45His Leu Gln Gly Lys Leu Ser Glu Leu Gln Val Glu Gln Thr Ser Leu
50 55 60Glu Pro Leu Gln Glu Ser Pro Arg Pro Thr Gly Val Trp Lys Ser Arg
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Gly Leu Gly Cys Asn Xaa Leu Arg Xaa Tyr
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108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa may be Thr or Met

<220>
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 <222> (5)..(5)
 <223> Xaa may be Met or Val

108 SEQ LIST RESUBMISSION.ST25

<220>
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 <222> (6)..(6)
 <223> Xaa may be Arg, His, or Gln

 <220>
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 <222> (7)..(7)
 <223> Xaa may be Asp, Lay, or Gly

 <400> 47
 Ser Pro Lys Xaa Xaa Xaa Xaa Ser Gly
 1 5

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 Xaa Val Leu Arg
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 <223> Xaa may be Asn or Lys

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 <222> (5)..(5)
 <223> Xaa may be Arg or Lys

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 Xaa Val Leu Arg Xaa
 1 5

<210> 50
 <211> 6

108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa may be Tyr or His

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Xaa Val Leu Arg Xaa Xaa
 1 5

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 <223> Xaa cannot be Asn if amino acid 25 is Arg and amino acid 26 is Tyr

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 <222> (25)..(25)
 <223> Xaa cannot be Arg if amino acid 21 is Asn and amino acid 26 is Tyr

<220>
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 <222> (26)..(26)
 <223> Xaa cannot Tyr if amino acid 21 is Asn and amino acid 25 is Arg

<400> 51

Asp Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly Ser Leu Ser
 1 5 10 15

Gly Leu Gly Cys Xaa Val Leu Arg Xaa Xaa
 20 25

108 SEQ LIST RESUBMISSION.ST25

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 <212> PRT
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<220>
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<400> 52

Asn Val Leu Arg Arg Tyr
 1 5

<210> 53
 <211> 32
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<220>
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 <223> Polypeptide may be present or absent

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 <222> (7)..(9)
 <223> Polypeptide may be present or absent

<400> 53

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
 20 25 30

<210> 54
 <211> 9
 <212> PRT
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<220>
 <223> Natriuretic peptide

<400> 54

Ser Pro Lys Met Val Gln Gly Ser Gly
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<210> 55
 <211> 10
 <212> PRT
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108 SEQ LIST RESUBMISSION.ST25

<220>

<223> Natriuretic peptide

<400> 55

His His His His His His Ala Asp Gly Glu
 1 5 10

<210> 56

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<400> 56

Ala Asp Gly Glu
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<210> 57

<211> 8

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<400> 57

Arg Arg Asp Ala Glu Asp Pro Arg
 1 5

<210> 58

<211> 5

<212> PRT

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<400> 58

Glu Gly Asp Arg Arg
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<210> 59

<211> 11

<212> PRT

<213> Artificial

<220>

<223> Extension sequence

<400> 59

His His His His His His Glu Gly Asp Arg Arg
 1 5 10

108 SEQ LIST RESUBMISSION.ST25

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 <211> 8
 <212> PRT
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<220>
 <223> Spacer sequence

<400> 60

Arg Arg Asp Ala Glu Asp Arg Arg
 1 5

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 <212> PRT
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<220>
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<220>
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 <223> Xaa can be any naturally occurring amino acid

<400> 61

His His His His His His Xaa Glu Gly Asp Arg Arg
 1 5 10

<210> 62
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<400> 62

Arg Gly Asp Ala Glu Asp Pro Arg
 1 5

<210> 63
 <211> 5
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 <213> Artificial

<220>
 <223> Leader sequence

<400> 63

Glu Gly Asp Pro Arg
 1 5

108 SEQ LIST RESUBMISSION.ST25

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<400> 64

His His His His His His Glu Gly Asp Pro Arg
 1 5 10

<210> 65
 <211> 9
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<220>
 <223> Spacer sequence

<400> 65

Ala Arg Gly Asp Ala Glu Asp Pro Arg
 1 5

<210> 66
 <211> 9
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<220>
 <223> Extension sequence

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 <223> Xaa can be any naturally occurring amino acid

<400> 66

His His His His His His Xaa Met Met
 1 5

<210> 67
 <211> 5
 <212> PRT
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<220>
 <223> Spacer sequence

<400> 67

Asp Asp Ala Gly Glu
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108 SEQ LIST RESUBMISSION.ST25

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<220>
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<400> 68

His His His His His His Ala Asp Gly Glu
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<210> 69
 <211> 4
 <212> PRT
 <213> Artificial

<220>
 <223> Spacer sequence

<400> 69

Glu Ala Gly Glu
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<210> 70
 <211> 4
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 <213> Artificial

<220>
 <223> Leader sequence

<400> 70

Glu Gly Asp Ala
 1

<210> 71
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Extension sequence

<400> 71

Glu Gly Asp Ala His His His His His Glu
 1 5 10

<210> 72
 <211> 11
 <212> PRT
 <213> Artificial

<220>
 <223> Extension sequence

108 SEQ LIST RESUBMISSION.ST25

<400> 72

Glu His His His His His His Ala Asp Gly Glu
 1 5 10

<210> 73

<211> 32

<212> PRT

<213> Homo sapiens

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<221> DISULFID

<222> (10)..(26)

<223> Disulfide bond may be present or absent

<400> 73

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
 20 25 30

<210> 74

<211> 32

<212> PRT

<213> Homo sapiens

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<223> A modifying moiety may be present

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<222> (31)..(31)

<223> Xaa is not Arg

<400> 74

Thr Ala Pro Arg Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Met
 1 5 10 15

Asp Arg Ile Gly Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Xaa Tyr
 20 25 30

<210> 75

<211> 32

<212> PRT

<213> Canis familiaris

<220>

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<222> (3)..(3)

108 SEQ LIST RESUBMISSION.ST25

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<223> Xaa can be any naturally occurring amino acid
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<223> Xaa can be any naturally occurring amino acid
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Ser Pro Xaa Met Met His Xaa Gly Gly Cys Phe Gly Arg Arg Leu Asp
1          5          10          15
Arg Ile Gly Ser Leu Ser Gly Leu Gly Cys Asn Val Leu Arg Xaa Tyr
                20          25          30

<210> 76
<211> 38
<212> PRT
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<223> Xaa can be any naturally occurring amino acid
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<222> (11)..(11)
<223> Xaa can be any naturally occurring amino acid
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Glu Val Xaa Tyr Asp Pro Cys Phe Gly His Xaa Ile Asp Arg Ile Asn
1          5          10          15
His Val Ser Asn Leu Gly Cys Pro Ser Leu Arg Asp Pro Arg Pro Asn
                20          25          30

Ala Pro Ser Thr Ser Ala
          35

<210> 77
<211> 22
<212> PRT
<213> Homo sapiens
<400> 77
Gly Leu Ser Lys Gly Cys Phe Gly Leu Lys Leu Asp Arg Ile Gly Ser
1          5          10          15

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108 SEQ LIST RESUBMISSION.ST25

Met Ser Gly Leu Gly Cys
20

<210> 78
<211> 28
<212> PRT
<213> Homo sapiens

<220>
<221> MISC_FEATURE
<222> (12)..(12)
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<400> 78

Ser Leu Arg Arg Ser Ser Cys Phe Gly Gly Arg Xaa Asp Arg Ile Gly
1 5 10 15

Ala Gln Ser Gly Leu Gly Cys Asn Ser Phe Arg Tyr
20 25

<210> 79
<211> 17
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<220>
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<222> (5)..(5)
<223> Xaa may be any amino acid other than Lys

<400> 79

Cys Phe Gly Arg Xaa Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly
1 5 10 15

Cys

<210> 80
<211> 36
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<220>
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<223> Xaa may be any naturally occurring amino acid, and may be present or absent

108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

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 <222> (33)..(33)
 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

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 <222> (34)..(34)
 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

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 <222> (35)..(35)
 <223> Xaa may be any naturally occurring amino acid

<220>
 <221> MISC_FEATURE
 <222> (36)..(36)
 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

<400> 80

Ser Pro Arg Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30

108 SEQ LIST RESUBMISSION.ST25

Xaa Xaa Xaa Xaa
35

<210> 81
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<213> Artificial

<220>
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<400> 81

Arg Val Leu Arg Arg His
1 5

<210> 82
<211> 32
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<220>
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<220>
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<223> Xaa may be any amino acid other than Lys

<220>
<221> MISC_FEATURE
<222> (27)..(27)
<223> Xaa may be any naturally occurring amino acid

<400> 82

Ser Pro Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp
1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Xaa Val Leu Arg Arg His
20 25 30

<210> 83
<211> 32
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<220>
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108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa is not Lys

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 <222> (27)..(27)
 <223> Xaa is not Lys

<400> 83

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Xaa Val Leu Arg Arg His
 20 25 30

<210> 84
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<400> 84

Xaa Cys Phe Gly Arg Arg Met Asp Arg Ile Ser Ser Ser Ser Gly Leu
 1 5 10 15

Gly Cys Xaa

<210> 85
 <211> 10
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<220>
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<400> 85

Ser Pro Lys Met Val Gln Gly Ser Gly Cys

108 SEQ LIST RESUBMISSION.ST25
10

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<212> PRT
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<220>
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<400> 86

Pro Lys Met Val Gln Gly Ser Gly Cys
1 5

<210> 87
<211> 8
<212> PRT
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<220>
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<400> 87

Lys Met Val Gln Gly Ser Gly Cys
1 5

<210> 88
<211> 7
<212> PRT
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<220>
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<400> 88

Met Val Gln Gly Ser Gly Cys
1 5

<210> 89
<211> 6
<212> PRT
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<220>
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<400> 89

Val Gln Gly Ser Gly Cys
1 5

<210> 90
<211> 5
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108 SEQ LIST RESUBMISSION.ST25

<220>
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<400> 90

Gln Gly Ser Gly Cys
1 5

<210> 91
<211> 4
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<400> 91

Gly Ser Gly Cys
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<210> 92
<211> 4
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<400> 92

Ser Pro Lys Met
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<210> 93
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<220>
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<400> 93

Ser Pro Lys Met Val
1 5

<210> 94
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<212> PRT
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Ser Pro Lys Met Val Gln

1

5

<210> 95
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 <400> 95

Lys Met Val Gln
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<210> 96
 <211> 5
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 <220>
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 <400> 96

Lys Met Val Gln Gly
 1 5

<210> 97
 <211> 6
 <212> PRT
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 <220>
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 <400> 97

Lys Met Val Gln Gly Ser
 1 5

<210> 98
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 <220>
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Lys Met Val Gln Gly Ser Gly
 1 5

<210> 99
 <211> 8
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108 SEQ LIST RESUBMISSION.ST25

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<210> 100
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 <212> PRT
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 Lys Val Leu Arg Arg His
 1 5

<210> 101
 <211> 5
 <212> PRT
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 Lys Val Leu Arg Arg
 1 5

<210> 102
 <211> 4
 <212> PRT
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 Lys Val Leu Arg
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<210> 103
 <211> 6
 <212> PRT
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 Arg Val Leu Arg Arg His

108 SEQ LIST RESUBMISSION.ST25

1

5

<210> 104
 <211> 5
 <212> PRT
 <213> Artificial

 <220>
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 <400> 104

Arg Val Leu Arg Arg
1 5

<210> 105
 <211> 4
 <212> PRT
 <213> Artificial

 <220>
 <223> Natriuretic peptide

 <400> 105

Arg Val Leu Arg
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<210> 106
 <211> 29
 <212> PRT
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 <222> (3)..(3)
 <223> Xaa is not Lys

<400> 106

Ser Pro Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu
20 25

<210> 107
 <211> 26
 <212> PRT
 <213> Artificial

 <220>
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108 SEQ LIST RESUBMISSION.ST25

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 <221> MISC_FEATURE
 <222> (3)..(3)
 <223> Xaa is not Lys

<400> 107

Ser Pro Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys
 20 25

<210> 108
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 <212> PRT
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<220>
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<220>
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<220>
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<220>
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108 SEQ LIST RESUBMISSION.ST25

<222> (7)..(7)
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<220>
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 <222> (9)..(9)
 <223> Xaa may be any naturally occurring amino acid and may be present or absent

<220>
 <221> MISC_FEATURE
 <222> (10)..(10)
 <223> Xaa may be any naturally occurring amino acid and may be present or absent

<400> 108

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Phe Gly Arg Arg Met
 1 5 10 15

Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Arg Val Leu Arg Arg
 20 25 30

His

<210> 109
 <211> 17
 <212> PRT
 <213> Artificial

<220>
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<220>
 <221> MISC_FEATURE
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 <223> xaa can be any naturally occurring amino acid

<220>
 <221> MISC_FEATURE
 <222> (10)..(10)
 <223> Xaa may be Ser or Lys

<220>
 <221> MISC_FEATURE
 <222> (11)..(11)
 <223> Xaa is Ser and may be present or absent

<220>
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 <222> (12)..(12)

<223> Xaa is Ser and may be present or absent

<220>

<221> MISC_FEATURE

<222> (13)..(13)

<223> Xaa is Ser and may be present or absent

<400> 109

Cys Phe Gly Arg Xaa Met Asp Arg Ile Xaa Xaa Xaa Gly Leu Gly
1 5 10 15

Cys

<210> 110

<211> 32

<212> PRT

<213> Artificial

<220>

<223> Natriuretic peptide

<220>

<221> MISC_FEATURE

<222> (30)..(30)

<223> Xaa is not Arg

<400> 110

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Arg Xaa Arg His
20 25 30

<210> 111

<211> 32

<212> PRT

<213> Artificial

<220>

<223> Natriuretic peptide

<220>

<221> MISC_FEATURE

<222> (27)..(27)

<223> Xaa is not Lys

<400> 111

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Xaa Val Leu Arg Arg His
20 25 30

108 SEQ LIST RESUBMISSION.ST25

<210> 112
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<220>
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 <222> (33)..(33)
 <223> xaa may be Lys or Cys

<400> 112

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His
 20 25 30

Xaa

<210> 113
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 <212> PRT
 <213> Artificial

<220>
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<220>
 <221> MISC_FEATURE
 <222> (3)..(3)
 <223> xaa is not Lys

<220>
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 <222> (14)..(14)
 <223> xaa is not Lys

<220>
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 <222> (23)..(23)
 <223> Xaa may be Gly, Met, Leu, Phe, Ile, or a conservative substitution thereof

<220>
 <221> MISC_FEATURE
 <222> (24)..(24)
 <223> Xaa may be Leu, Trp, Tyr, Phe, or a conservative substitution thereof

<220>
 <221> MISC_FEATURE

108 SEQ LIST RESUBMISSION.ST25

<222> (25)..(25)
 <223> Xaa may be Gly, Arg, or a conservative substitution thereof

<400> 113

Ser Pro Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Xaa Xaa Xaa Cys
 20 25

<210> 114
 <211> 23
 <212> PRT
 <213> Artificial

<220>
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<220>
 <221> MISC_FEATURE
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 <223> Xaa may be Thr, Ala, Arg, His, Pro or Glu

<220>
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 <222> (12)..(12)
 <223> Xaa may be Lys, Asn, Arg, Ser, Asp or Pro

<220>
 <221> MOD_RES
 <222> (12)..(12)
 <223> Methylation if Xaa is Asn

<220>
 <221> MISC_FEATURE
 <222> (17)..(17)
 <223> Xaa is not Gly

<220>
 <221> MOD_RES
 <222> (17)..(17)
 <223> Xaa may be Orn, Har, p-amidinophenyl Ala, or Ile

<400> 114

Lys Cys Phe Lys Gly Lys Asn Asp Arg Xaa Lys Xaa Gln Ser Gly Leu
 1 5 10 15

Xaa Cys Asn Ser Phe Lys Tyr
 20

<210> 115
 <211> 195
 <212> PRT
 <213> Artificial

<220>

108 SEQ LIST RESUBMISSION.ST25

<223> BNP pro-pentapeptide

<400> 115

His His His His His His Glu Gly Asp Arg Arg Ser Pro Lys Met Val
 1 5 10 15

Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser
 20 25 30

Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His Arg Arg Asp Ala Glu
 35 40 45

Asp Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met
 50 55 60

Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg
 65 70 75 80

His Arg Arg Asp Ala Glu Asp Ser Pro Lys Met Val Gln Gly Ser Gly
 85 90 95

Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly
 100 105 110

Cys Lys Val Leu Arg Arg His Arg Arg Asp Ala Glu Asp Ser Pro Lys
 115 120 125

Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser
 130 135 140

Ser Ser Ser Gly Leu Gly Cys Lys Val Leu Arg Arg His Arg Arg Asp
 145 150 155 160

Ala Glu Asp Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg
 165 170 175

Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Lys Val Leu
 180 185 190

Arg Arg His
 195

<210> 116

<211> 29

<212> PRT

<213> Artificial

<220>

<223> Natriuretic peptide

108 SEQ LIST RESUBMISSION.ST25

<220>
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 <223> Xaa may be Lys, Arg, or Gly; must be Lys if amino acids 13 and 26
 are not Lys

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 <222> (13)..(13)
 <223> Xaa may be Lys, Arg, or Gly; must be Lys if amino acids 2 and 26
 are not Lys

<220>
 <221> MISC_FEATURE
 <222> (26)..(26)
 <223> Xaa may be Lys, Arg, or Gly; must be Lys if amino acids 2 and 13
 are not Lys

<400> 116

Pro Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp Arg
 1 5 10 15

Ile Ser Ser Ser Ser Gly Leu Gly Cys Xaa Val Leu Arg
 20 25

<210> 117
 <211> 37
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

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 <223> Xaa may be any naturally occurring amino acid, and may be present
 or absent

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 or absent

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 or absent

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 or absent

108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa can be any naturally occurring amino acid

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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

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108 SEQ LIST RESUBMISSION.ST25

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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

<220>
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 <223> Xaa can be any naturally occurring amino acid, and may be present or absent

<400> 117

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Phe Gly Arg Xaa Met
 1 5 10 15

Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Xaa Xaa Xaa Xaa Xaa
 20 25 30

Xaa Xaa Xaa Xaa Xaa
 35

<210> 118
 <211> 4
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

<400> 118

Gln Gly Ser Gly
1

<210> 119

<211> 5
<212> PRT
<213> Artificial

<220>

<223> Natriuretic peptide

<400> 119

Val Gln Gly Ser Gly
1 5

<210> 120

<211> 6
<212> PRT
<213> Artificial

<220>

<223> Natriuretic peptide

<400> 120

Met Val Gln Gly Ser Gly
1 5

<210> 121

<211> 8
<212> PRT
<213> Artificial

<220>

<223> Natriuretic peptide

<400> 121

Pro Lys Met Val Gln Gly Ser Gly
1 5

<210> 122

<211> 9
<212> PRT
<213> Artificial

<220>

<223> Natriuretic peptide

<400> 122

Ser Pro Lys Met Val Gln Gly Ser Gly
1 5

<210> 123

108 SEQ LIST RESUBMISSION.ST25

<211> 29
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

<400> 123

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys Lys Val Leu
 20 25

<210> 124
 <211> 26
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

<400> 124

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp
 1 5 10 15

Arg Ile Ser Ser Ser Gly Leu Gly Cys
 20 25

<210> 125
 <211> 9
 <212> PRT
 <213> Artificial

<220>
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<220>
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 <223> Xaa may be Gly, Arg, or Lys

<400> 125

Ser Pro Xaa Met Val Gln Gly Ser Gly
 1 5

<210> 126
 <211> 25
 <212> PRT
 <213> Artificial

<220>
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108 SEQ LIST RESUBMISSION.ST25

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 <222> (12)..(12)
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<220>
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 <222> (25)..(25)
 <223> Xaa may be Lys, Gly, or Arg

<400> 126

Xaa Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp Arg Ile
 1 5 10 15

Ser Ser Ser Ser Gly Leu Gly Cys Xaa
 20 25

<210> 127
 <211> 24
 <212> PRT
 <213> Artificial

<220>
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<220>
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 <222> (8)..(8)

<220>
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 <222> (24)..(24)

<400> 127

Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile
 1 5 10 15

Ser Ser Ser Ser Gly Leu Gly Cys
 20

<210> 128
 <211> 17
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

<400> 128

108 SEQ LIST RESUBMISSION.ST25

Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly
 1 5 10 15

Cys

<210> 129
 <211> 18
 <212> PRT
 <213> Artificial
 <220>
 <223> Natriuretic peptide
 <400> 129

Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly
 1 5 10 15

Cys Lys

<210> 130
 <211> 23
 <212> PRT
 <213> Artificial
 <220>
 <223> Natriuretic peptide
 <400> 130

Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser Gly Leu Gly
 1 5 10 15

Cys Lys Val Leu Arg Arg His
 20

<210> 131
 <211> 32
 <212> PRT
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 <220>
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<220>
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 <222> (14)..(14)
 <223> Xaa can be any naturally occurring amino acid
 <220>
 <221> MISC_FEATURE
 <222> (27)..(27)
 <223> Xaa can be any naturally occurring amino acid

108 SEQ LIST RESUBMISSION.ST25

<400> 131

Ser Pro Lys Met Val Gln Gly Ser Gly Cys Phe Gly Arg Xaa Met Asp
1 5 10 15

Arg Ile Ser Ser Ser Ser Gly Leu Gly Cys Xaa Val Leu Arg Arg His
20 25 30

<210> 132

<211> 17

<212> PRT

<213> Artificial

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<223> Xaa can be any naturally occurring amino acid

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<223> Xaa can be any naturally occurring amino acid

<400> 132

Cys Phe Gly Arg Xaa Met Asp Arg Ile Ser Ser Ser Ser Gly Xaa Gly
1 5 10 15

Cys

<210> 133

<211> 9

<212> PRT

<213> Artificial

<220>

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<222> (3)..(3)

<223> Xaa can be any naturally occurring amino acid

<400> 133

Ser Pro Xaa Met Val Gln Gly Ser Gly
1 5

<210> 134

<211> 6

<212> PRT

<213> Artificial

108 SEQ LIST RESUBMISSION.ST25

<220>
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<220>
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 <223> Xaa may not be Lys

<400> 134

Xaa Val Leu Arg Arg His
 1 5

<210> 135
 <211> 28
 <212> PRT
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<220>
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<220>
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<220>
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108 SEQ LIST RESUBMISSION.ST25

<222> (7)..(7)
 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

<220>
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 <222> (9)..(9)
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<220>
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<220>
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 <223> Xaa can be any naturally occurring amino acid

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 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

<400> 135

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Phe Gly Arg Xaa Met Asp
 1 5 10 15

Arg Ile Gly Leu Gly Cys Xaa Xaa Xaa Xaa Xaa
 20 25

108 SEQ LIST RESUBMISSION.ST25

<210> 136
<211> 37
<212> PRT
<213> Artificial

<220>
<223> Natriuretic peptide

<220>
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or absent

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108 SEQ LIST RESUBMISSION.ST25

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<220>
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 <223> Xaa may be any naturally occurring amino acid, and may be present or absent

<400> 136

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Phe Gly Arg Xaa Met
 1 5 10 15

Asp Arg Ile Xaa Xaa Xaa Xaa Gly Leu Gly Cys Xaa Xaa Xaa Xaa Xaa
 20 25 30

Xaa Xaa Xaa Xaa Xaa
 35

<210> 137
 <211> 32
 <212> PRT
 <213> Artificial

<220>
 <223> Natriuretic peptide

<220>
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<220>
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108 SEQ LIST RESUBMISSION.ST25

<220>

<221> MISC_FEATURE

<222> (31)..(31)

<223> Xaa may be Arg or His

<400> 137

Ser Pro Xaa Met Met His Xaa Ser Gly Cys Phe Gly Arg Arg Leu Asp
1 5 10 15

Arg Ile Gly Ser Leu Ser Gly Leu Gly Cys Asn Val Leu Arg Xaa Tyr
20 25 30